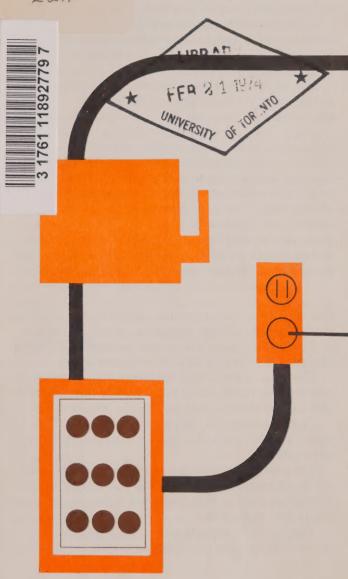
## Electrician

Covernment Publications

Ministry of Colleges & Universities Apprenticeship Training

CH2ON DG Z211



Over the years the outstanding achievements of scientists and engineers in research and development laboratories have contributed to the amazing growth of the electrical industry, so that today electricity is the prime source of motive power in home and industry.

It provides light, heat, environmental control and entertainment by radio and television. It can be transmitted over long distances quickly, with a low loss of energy and at a low cost. It is readily adapted to a constantly increasing variety of uses.

Apprenticeship training in this highly technical trade is available under the modernized manpower training program sponsored by the Ministry of Colleges and Universities.

During the life of the contract the apprentice works under the supervision of skilled and experienced journeymen.

Qualifications

Applicants for apprenticeship must be 16 years or over and have a minimum of Grade 10 standing in an Ontario secondary school or an equivalent level of education. There are no maximum age limits for apprentices. Applicants should have good colour vision and be able to work at heights or in confined spaces. They should have an interest in mathematics, blue print reading and mechanical equipment.

**Duties** 

Electricians lay out, assemble, install, connect and test electrical fixtures, apparatus control equipment, and wiring for systems of alarm connection, light, heat or power in buildings and other industries.

They plan installations for blueprints, sketches and specifications; install panel boards, switch boxes, and pull boxes and other related electrical devices.

They measure, cut, thread, bend, assemble and install conduit and other types of electrical conductor enclosures.

They splice electrical connections by soldering or other mechanical means and re-insulate to protect conductor connections. They test electrical equipment for proper operation.

They must be capable of trouble-shooting, accurate diagnosis and corrective action.

**Training** 

The apprenticeship training program to achieve construction and maintenance electrician standing covers five periods of training and instruction of 1,800 hours each (equivalent to approximately 3 1/2 years).

The training and instruction consists of practical on-the-job training coupled with related instruction at a college of applied arts and technology.

The related courses of instruction are compulsory and include a seven week basic course, an intermediate course of seven weeks and eight weeks of advanced instruction near the end of the apprenticeship contract.

**Training Allowances** 

During in-school instruction, the apprentice's tuition fees, living allowance, and travel expenses are provided by the Federal Department of Manpower and Immigration and the Ministry of Colleges and Universities, under a shared-cost agreement.

**Earning While Learning** 

While training on the job, apprentices earn while they learn. Their wages are based on a percentage of those paid to journeymen in the same trade in the same shop. The percentages range from a minimum of 40 per cent to a maximum of 80 per cent during the periods of training and instruction.

At the conclusion of each 1,600 or 1,800 hour period, apprentices must receive the recommendation of their employer before proceeding to the next period

of the contract.

Certificates of Apprenticeship

On completion of the required number of periods of training and instruction apprentices must write a final examination.

A mark of 60 per cent will entitle them to a Certificate of Apprenticeship. Apprentices in the construction and maintenance electrician classification obtaining a mark of 70 per cent or more will receive an inter-provincial Seal permitting them to practice in their trade in all of Canada's provinces.

A Certificate of Qualification issued by the Ministry of Colleges and Universities is necessary for workers in this trade. It is issued by the Ministry on payment of a \$10 fee, and must be renewed every second year on the date of birth.

## **Employment Prospects**

The employment outlook for the electrician is excellent and once the status of journeyman is obtained, individual abilities are usually the controlling factor in advancement to administrative positions or ownership of a business.

Employment opportunities will occur in the areas of public utilities, residential construction, industrial and commercial construction and in the development and manufacture of electrical components.

## **Enquiries**

All enquiries concerning apprenticeship should be addressed to the Director of Manpower Training or to the district offices across the province listed on this leaflet.

## District Offices Manpower Training Branch

Barrie 728-1951	North Bay 474-5509
Belleville 968-8671	Ottawa 731-7100
Brantford 756-5197	Owen Sound 376-5790
Brockville 345-0660	Pembroke 732-9994
Callander 752-1231	Peterborough 743-4172
Chatham 352-2800	Sault Ste. Marie 949-3331
Cornwall 933-4260	St. Catharines 682-4313
Guelph 821-3770	Sarnia 337-2165
Hamilton 527-9105	Stratford 273-1520
Kenora 468-3128	Sudbury 566-3071
Kingston 544-5400	Thunder Bay 345-2101
Kitchener 744-5211	Timmins 267-2420
London 438-2911	Toronto 965-4211
	Windsor 256-8278



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Jack McNie, Minister J. Gordon Parr, Deputy Minister